C++ ASSIGNMENT

1.Ques :Input a string of size n and update all the odd positions in the string to character ‘#’. Consider
0-based indexing.
Input : str = "Pbwcshkuiglhlds"
Output : "P#w#s#k#i#l#l#s"
input : str = "a"
Output : "a"

Ans:
```
#include<iostream>
using namespace std;
int main(){
    string s;
    cin>>s;
    int n=s.size();
    for(int i=0;s[i]!='\0';i++){
        if(i%2==1){
            s[i]='#';
        }
    }
    for(int i=0;i<n;i++){
        cout<<s[i];
    }
    return 0;
}
```

2.Ques :Input a string of length n and count all the consonants in the given string.
Input : "pwians"

Output : 4

Input : "abdc"

Output : 3

Ans:
```
#include<iostream>
using namespace std;
int main(){
        string str;
        cin>>str;
        int n=str.length();
        int count=0;
        for(int i=0;i<n;i++){
                //constant

if(str[i]=='a'||str[i]=='e'||str[i]=='i'||str[i]=='o'||str[i]=='u'){
                        continue;
                }
                else count++;
        }
        cout<<count;
        return 0;
}
```

3.Ques :Check whether the given string is palindrome or not.

Input : "abcde"

Output : No

Input : "abcdcba"

Output : Yes

Ans:
```
#include<iostream>
#include<string>
#include<algorithm>
using namespace std;
```

```
int main(){
        string str;
        cin>>str;
        string x=str;
   reverse(str.begin(),str.end());
        if(x==str) cout<a<"YES";
        else cout<<"NO";
        return 0;
}
```

4.Ques:Input a string of even length and reverse the second half of the string.

Input : str = "abcdefgh"

Output : abcdhgfe

Input :str = "pwians"

Output : pwisna

Ans:

```
#include<iostream>
#include <string>
#include<algorithm>
using namespace std;
int main(){
        string s;
        getline(cin,s);
        int n=s.length();
        reverse(s.begin()+n/2,s.end());
        cout<<s;
        return 0;
}
```

5.Ques:Input a string of length less than 10 and convert it into integer without using builtin function.

Input : "3244"

Output : 3244

Input : "12"

Output : 12

Ans:
```
#include<iostream>
#include<string>
#include<algorithm>
using namespace std;
int main(){
    string s;
    getline(cin,s);
    int num=0,p=1;
    while(s.size()){
        num+=p*(s.back()-'0');
        s.pop_back();
        p*=10;
    }
    cout<<num;
    return 0;
}
```